UNITED STATES PATENT AND TRADEMARK OFFICE

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CARLSON, GASKEY & OLDS, P.C.
400 WEST MAPLE ROAD
SUITE 350
BIRMINGHAM, MI 48009

EXAMINER
KASRAIAN, ALLAHYAR

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *13 November 2007*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-6,8 and 10-21* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-6,8 and 10-21* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☐ All   b) ☐ Some *   c) ☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Remarks

1.   The present Office Action is based upon the Applicant's amendment filed on Dec.

13, 2007. **Claims 1-6, 8 and 10-21** are now pending in the present application.

Art Unit - Location

2.   The Art Unit location of this application in the USPTO has changed. To aid in

correlating any papers for this application, all further correspondence regarding this

application should be directed to Art Unit 2617.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

4.   **Claim 13** is rejected under 35 U.S.C. 112, second paragraph, as being

incomplete for omitting essential structural cooperative relationships of elements, such

omission amounting to a gap between the necessary structural connections. See

MPEP § 2172.01. The omitted structural cooperative relationships are: an access

terminal in line 2 of the claim, a gateway access terminal in line 3 of the claim; an

access terminal in line 5 of the claim, a gateway access terminal in line 5 of the claim, a

data backlog in lines 5-6 of the claim; a gateway access terminal in line 7 of the claim,

and a data backlog in line 7 of the claim. The relationship between the elements make

the claim indefinite, For example, it is not clear the access terminal in lines 2 and 5 are

the same or there are a first and second access terminals claimed; and it is not clear the gateway access terminals on lines 3, 5 and 7 are the same or there are a first, second and third gateway access terminals claimed; it is not clear the data backlog in lines 6 and 7 are the same of there are a first and second data backlog claimed.

The Examiner interprets the claim as: a communication resource allocation method, comprising:

determining whether an access terminal communicating with a base station of a communication network is a gateway access terminal that is configured to serve at least one user device;

determining whether the access terminal determined to be the gateway access terminal has a data backlog at the gateway access terminal; and

adjusting a priority of the gateway access terminal that has a data backlog and that satisfies a selected criteria.

5.   **Claims 14-21** are rejected due to their dependency to **claim 13**.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7.   **Claim 1, 8, 10-14 and 19-20** are rejected under 35 U.S.C. 102(b) as being

anticipated by **Iuoras et al. (U.S. Patent # 6,445,707 B1)** (hereinafter Iuoras).

Consider **claim 1**, Iuoras clearly shows and discloses a resource allocation

method for a communication network (see FIG. 1 for a satellite communication network)

having at least one gateway user (see FIG. 1 any user in Terrestrial Network 14)

connected to the network via at least one gateway access terminal (See FIG. 1 for

Gateway Terminals 12) and at least one non-gateway user (See FIG. 1 for User

Terminal 11), comprising:

identifying said at least one gateway access terminal (indicated in lines 58-61 of

column 36 that each terminal could be identified by three numbers (x, y, z)...);

obtaining a data backlog size of said at least one gateway access terminal (line

17 of column 8, for monitoring downlink buffer occupancy which is considered as

gateway access terminal backlog size); and

selectively raising the priority of at least one gateway access terminal based on

the data backlog size (lines 13-22 of col. 8 "It requires continuous monitoring of cell

arrival rates (for ABR and higher priority traffic)... downlink buffer occupancy... in order

to calculate the fair rate and amount of rate adoption... It then determines the final fair

rate and rate adaptation (increase, decrease or no change) for each UL-DL

combination." where ABR stands for Available Bit Rate and it can be adjusted based on

traffic priority to decrease, increase or no change in a network; also see FIG. 4 for ABR

traffic and Scheduler, lines 51-67 of col. 15 and lines 1-15 of col. 16 for description of

Broadcast Rate Control Allocation (BRCA) scheme to calculate the fair rate and rate

adaptation based on ABR requests, downlink buffer occupancy, etc.).

Consider **claim 8 as applied to claim 1 above**, luoras et al. clearly shows and

disclose labeling the gateway access terminals as a special quality of service (QoS)

class (see descriptions for ABR in claim 1 above, FIG. 1 and lines 36-39 of column 12

where it says, "only ABR services can provide some level of QoS guarantee. The

gateway terminals make possible the interfacing of the satellite network with terrestrial

networks 14.").

Consider **claim 10 as applied to claim 1 above**, luoras discloses

communicating between the at least one gateway access terminal and at least one user

device (FIG. 1 for gateway terminals 12 or User Terminals 11, and any user in

Terrestrial network 14 or any of User 13; line 23-31 of col. 12); and

communicating between the at least one gateway access terminal and a base

station of the communication network on behalf of the at least one user device (FIG. 1,

satellite 10 is considered as a base station, lines 37-39 of col. 12).

Consider **claim 11 as applied to claim 1 above**, luoras discloses the gateway

access terminal is configured to communicate with a base station of the communication

network on behalf of one or more of a plurality of user devices that communicate with

the gateway access terminal (FIG. 1, satellite 10 is considered as a base station, lines

37-39 of col. 12).

Consider **claim 12 as applied to claim 1 above**, Iuoras discloses the data

backlog size corresponds to a buffer size at the gateway access terminal (line 17 of

column 8, for monitoring downlink buffer occupancy).

Consider **claim 13**, Iuoras clearly shows and discloses a communication

resource allocation method (FIG. 1), comprising:

determining whether an access terminal (FIG.1 gateway terminals 12 or User

Terminals 11) communicating with a base station (FIG. 1, satellite 10 is considered as a

base station) of a communication network is a gateway access terminal (FIG.1 gateway

terminals 12 or User Terminals 11) that is configured to serve at least one user device

(any user in Terrestrial network 14 or any of User 13; line 23-31 of col. 12);

determining whether a access terminal determined to be a gateway access

terminal (FIG.1 gateway terminals 12 or User Terminals 11) has a data backlog at the

gateway access terminal (FIG.3 for User Terminal 1 to n with terminal queues 39 as

considered as data backlogs); and

adjusting a priority of a gateway access terminal that has a data backlog and that

satisfies a selected criteria (lines 66-67 of col. 165 and lines 1-15 of col. 16, the selected

criteria is considered as the fair rate for terminals, and it is adjusted based on

monitoring cell arrival rates, ABR capacity, downlink capacity, etc).

Consider **claim 14 as applied to claim 13 above**, luoras further discloses the selected criteria comprises a size of the data backlog being above a threshold that is at least one of a predetermined amount or an amount based at least in part on a data backlog at another gateway access terminal (lines 39-54 of col. 35 for queue size management of the terminals).

Consider **claim 19 as applied to claim 13 above**, luoras further discloses determining an updated data backlog size for any gateway access terminals communicating with the base station after at least one of said gateway access terminals transmits data; and repeating the adjusting step based upon the updated data backlog size (lines 38-42 of col. 16 and lines 15-22 of column 8).

Consider **claim 20 as applied to claim 13 above**, luoras further discloses the selected criteria comprises the gateway access terminal serving at least two user devices and the method comprises raising a priority of the gateway access terminal only if the selected criteria is satisfied (lines 19-29 of col. 35, terminal with more traffic considered as serving more users with regards to other terminals).

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

9.   **Claims 2 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Iuoras (U.S. Patent # 6,445,707 B1)** in view of **Schiff (U.S. Patent Application Publication # 2004/0018849 A1)**.

Consider **claim 2 as applied to claim 1 above**, Iuoras discloses the claimed

invention except the raising step is conducted if the data backlog size of said at least

one gateway access terminal is above a predetermined threshold.

In the same field of endeavor, Schiff clearly shows and discloses the raising step

is conducted if the data backlog size of said at least one gateway access terminal is

above a predetermined threshold (see FIG. 1, 2, and 3. as indicated in lines 6-9 of

paragraph [0024] wireless communication 200 in FIG. 2 maybe a component of

gateway 110 in FIG. 1 transmitting forward channel data to user devices 130, 140,

through communication satellite 120 in FIG. 1 Also as it is clearly stated in lines 10-12 of

abstract, "When the queue length is exceeds predetermined upper limit, the

transmission power and data rate are increased." The queue length and the

predetermined upper are considered as the data backlog size and predetermined

threshold, and raising step is considered as increasing data rate and/or transmission

power).

Therefore, it would have been obvious to a person of ordinary skills in the art at

the time the invention was made to combine raising data rate or power transmission

when the data backlog size (queue length) is a above predetermined threshold (upper

limit) taught by Schiff to the resource allocation method disclosed by Iuoras for purpose

of increasing resources for a user(s) with more resource consuming in a communication

network. The proper motivation is to efficiently allocate resources between users in a

communication network.

Consider **claim 15 as applied to claim 14 above**, Iuoras discloses the claimed

invention except raising the priority of the gateway access terminal if the data backlog

size is above the threshold.

In the same field of endeavor, Schiff discloses the raising the priority of the

gateway access terminal if the data backlog size is above the threshold (see FIG. 1, 2,

and 3. as indicated in lines 6-9 of paragraph [0024] wireless communication 200 in FIG.

2 maybe a component of gateway 110 in FIG. 1 transmitting forward channel data to

user devices 130, 140, through communication satellite 120 in FIG. 1 Also as it is clearly

stated in lines 10-12 of abstract).

Therefore, it would have been obvious to a person of ordinary skills in the art at

the time the invention was made to combine raising data rate or power transmission

when the data backlog size (queue length) is a above predetermined threshold (upper

limit) taught by Schiff to the resource allocation method disclosed by Iuoras for purpose

of increasing resources for a user(s) with more resource consuming in a communication

network. The proper motivation is to efficiently allocate resources between users in a

communication network.

10.   **Claims 3-6 and 16-18** are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Iuoras (U.S. Patent # 6,445,707 B1)** in view of **Liu et al. (U.S.

Patent Application Publication # 2002/0178311 A1)** (hereinafter Liu).

Consider **claims 3 and 16 as applied to claims 1 and 13 above respectively**, Iuoras discloses said at least one gateway access terminal comprises a plurality of gateway access terminals (see FIG. 1 for Gateway Terminals 12. Iuoras et al. also disclose queue size management in lines 39-55 of column 35 with regards to data backlog size).

However, Iuoras fails to disclose wherein the raising step comprises raising the priority of the gateway access terminal having the largest data backlog size.

In the same field of endeavor, Liu clearly discloses the raising step comprises raising the priority of the gateway access terminal having the largest data backlog size (see FIG. 1A and lines 1-10 of paragraph [0028] where it sys, "an arbitration method and apparatus for arbitrating between a plurality of N queues requiring access to a resource wherein each queue is accorded a priority based on the length of the queue, that is the number of data packets enqueued at the corresponding queue... the lengths of each of the queues are determined and compared, and the queue having the greatest length is accorded the highest priority in an arbitration scheme." The N queues are considered as N data backlog in gateway access terminals and the length of each queue is considered as the size of data backlog).

Therefore, it would have been obvious to a person of ordinary skills in the art at the time the invention was made to incorporate the priority scale based on the largest data backlog size as taught by Liu to gateway access terminals disclose by Iuoras et al. for purpose of increasing resources for a user(s) with more resource consuming in a

communication network. The proper motivation is to efficiently allocate resources

between users in a communication network.

Consider **claim 4 as applied to claim 3 above**, the claim is rejected for the

same reason(s) set forth on **claim 3** since Liu disclose "the queue having the greatest

length is accorded the highest priority" which "the greatest length" is broad enough that

could be interpreted as a predetermined multiple of the smallest queue length (data

backlog sizes), and if the largest queue length is less than the predetermined multiple of

the smallest queue length then it could maintain the priority. Generally, the comparison

of the queue lengths could be a design choice to determine how large the queue length

should be to raise the priority of the gateway access terminal access.

Consider **claim 5 as applied to claim 3 above**, Liu further discloses comparing

data backlog sizes for at least two of said plurality of gateway access terminals (see the

arbitration method explained in lines 14-21 of paragraph [0028] which indicates the

comparison of the queue lengths based on their weight counts as stated in lines 20-21,

"priority determined based on a current weight count value associated with the queue".

The definition of the weight count is disclosed lines 15-17 as the number of data

enqueued); and assigning relative priorities for said at least two gateway access

terminals based on the relative data backlog sizes of said at least two gateway access

terminals (see lines 18-21 where it says, "arbitrating between the plurality of queues

based on priorities associated with the queues, each corresponding one of the queues

having a corresponding priority determined based on a current weight count value

associated with the queue" the relative priorities and relative data backlog sizes are

considered as priorities associated with the queues and the current weight count values

respectively).

Consider **claim 6 as applied to claim 3 above**, Liu further disclose updating the

data backlog size after at least one of said plurality of gateway access terminals

transmits data (see lines 21-23 of paragraph [0028] where it says, "decreasing the

weight count value associated with each queue each time the corresponding queue is

granted access to the resource". This is considered as updating the data backlog size).

However Iuoras et al. as modified by Liu et al., fail to disclose repeating the

identifying, obtaining, and selectively raising steps for said plurality of gateway access

terminals.

In addition, Iuoras et al. disclose the continuous monitoring the system to

calculate the final fair rate (indicated in lines 15-22 of column 8).

It would have been obvious at the time the invention was made to a person of

ordinary skills in the art to repeat the identifying, obtaining, and selectively raising steps

for said plurality of gateway access terminals since "continuous monitoring" means to

maintain a balance of the system with the fair resource allocation. Any time a user need

more or less resources, the allocating system should recognize the user, acquire its

buffer, and change its priority. The proper motivation is to continuously maintaining a

fair usage of resources in a communication network system.

Consider **claim 17 as applied to claim 13 above**, Iuoras discloses the claimed invention except a gateway access terminal having a data backlog size that is greater than any other gateway access terminal communicating with the base station and that is at least a selected multiple of a smallest data backlog size of the gateway access terminals communicating with the base station and the method comprises one of raising the priority of the gateway access terminal having the largest data backlog size if the largest data backlog size is at least the selected multiple of the smallest data backlog size; or maintaining the priority of the gateway access terminal if the largest data backlog size is less than the selected multiple of the smallest data backlog size.

In the same field of endeavor, Liu discloses a gateway access terminal having a data backlog size that is greater than any other gateway access terminal communicating with the base station and that is at least a selected multiple of a smallest data backlog size of the gateway access terminals communicating with the base station and the method comprises one of raising the priority of the gateway access terminal having the largest data backlog size if the largest data backlog size is at least the selected multiple of the smallest data backlog size; or maintaining the priority of the gateway access terminal if the largest data backlog size is less than the selected multiple of the smallest data backlog size (the claim is rejected for the same reason(s) set forth on **claim 16** since Liu disclose "the queue having the greatest length is accorded the highest priority" which "the greatest length" is broad enough that could be interpreted as a predetermined multiple of the smallest queue length (data backlog

sizes), and if the largest queue length is less than the predetermined multiple of the smallest queue length then it could maintain the priority. Generally, the comparison of the queue lengths could be a design choice to determine how large the queue length should be to raise the priority of the gateway access terminal access).

Therefore, it would have been obvious to a person of ordinary skills in the art at the time the invention was made to incorporate the priority scale based on the largest data backlog size as taught by Liu to gateway access terminals disclose by Iuoras for purpose of increasing resources for a user(s) with more resource consuming in a communication network. The proper motivation is to efficiently allocate resources between users in a communication network.

Consider **claim 18 as applied to claim 13 above**, Iuoras discloses the claimed invention except determining relative data backlog sizes for at least two gateway access terminals communicating with the base station; and assigning relative priorities for said at least two gateway access terminals based on the relative data backlog sizes of said at least two gateway access terminals.

In the same field of endeavor, Liu discloses determining relative data backlog sizes for at least two gateway access terminals communicating with the base station; and assigning relative priorities for said at least two gateway access terminals based on the relative data backlog sizes of said at least two gateway access terminals (the arbitration method explained in lines 14-21 of paragraph [0028]; lines 18-21 of paragraph [0028] for assigning relative priorities, the relative priorities and relative data

backlog sizes are considered as priorities associated with the queues and the current

weight count values respectively).

Therefore, it would have been obvious to a person of ordinary skills in the art at

the time the invention was made to incorporate the relative priority scale based on

weight count value for data backlog size as taught by Liu to gateway access terminals

disclose by Iuoras for purpose of increasing resources for a user(s) with more resource

consuming in a communication network. The proper motivation is to efficiently allocate

resources between users in a communication network.

11.   **Claim 21** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Iuoras**

(U.S. Patent # 6,445,707 B1) in view of **Thermond et al. (U.S. Patent Application**

Publication # 2003/0117986 A1) (hereafter Thermond).

Consider **claim 21 as applied to claim 13 above**, Iuoras discloses the claimed

invention except determining whether resource usage of at least one gateway access

terminal exceeds a hogger threshold; and adjusting the priority of said at least one

gateway access terminal if the resource usage exceeds the hogger threshold.

In the same field of endeavor, Thermond discloses determining resource usage

of at least one gateway access terminal with a hogger threshold (see FIG. 1, 9 and lines

1-3 of paragraph [0050] where it says, "the actual usage of a WLAN client/wireless

terminal is compared to a respective usage threshold (step 904)." The usage threshold

is considered as hogger threshold and the WLAN client/wireless terminal as the

gateway access terminal); and adjusting the priority of said at least one gateway access terminal if the resource usage exceeds the hogger threshold (see lines 3-5 of paragraph [0050] where it says, "If this comparison is unfavorable (as determined at step 906), an adjustment for the WLAN client/wireless terminal is then determined (step 908)." The adjustment is considered as adjustment in priority of using resources. More details are stated in lines 10-15 of column [0049], "Usage thresholds for each WAP consider the level of usage that each wireless terminal is allowed, e.g., a percentage of available resources, a data rate per unit time, or another measure of the wireless terminal's usage of the wireless resources of a WAP").

Therefore, it would have been obvious to a person of ordinary skills in the art at the time the invention was made to incorporate the hogger threshold (usage threshold) for adjusting priority of a gateway access terminal as taught by Thermond the resource management method disclose by luoras for purpose of adjusting resources for a user(s) with more resource consuming in a communication network. The proper motivation is to efficiently allocate resources between users in a communication network.

Response to Arguments

12.   Applicant's arguments filed Nov. 13, 2007 have been fully considered but they are not persuasive.

Applicant argues, the 4th paragraph on pages 7 of Remarks, that *luoras* reference does not include using a data backlog of a gateway access terminal, but *luoras* only uses the input and output ports of the onboard controller 30 of the satellite

node 10 for congestion control and related functions. Applicant also argues, the 2nd

paragraph on pages 8 of Remarks, the ports on board the satellite note 10 for

congestion control and does not use any data backlog size of any of the use terminal 11

or gateway terminal 12. The Examiner refers to the independent claim 1, and notes that

the claim does not indicate where the backlog for the gateway access terminal is

located or assign to. In addition, whether *luoras* reference uses the congestion control

for the input and output ports of the satellite or else, it clearly indicates obtaining the

downlink buffer occupancy, lines 15-20 of column 8. The buffers are assigned to the

User terminals or Gateway terminals as indicated in FIG. 3 and FIG. 4. Moreover,

Applicant does not disclose the advantage of obtaining a backlog size of an access

terminal assign at access terminal over the backlog assign to the access terminal at the

resource allocator. One of ordinary skill in the art, furthermore, would have expected

Applicant's invention to perform equally well with having the backlog or buffer assign to

each access terminal at the base station or resource allocator because it can obtain the

performance of the access terminals.

In addition, *luoras* reference does not only regard to congestion control, it also

determines a fair rate adoption (increase, decrease or no change) for each user

terminal based on cell arrival rate, ABR capacity request, downlink buffer occupancy,

etc. (see lines 20-22 of col. 8, 66-67 of col. 15, and 1-15 of col. 16). Therefore, the

Examiner's interpretation of downlink buffer occupancy as a data backlog size is valid

and reasonable.

Conclusion

13.   The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

a.   Kudrimoti et al. (U.S. Patent # 6,751,193 B1) disclose Method and apparatus for controlling data transfer between two stations.

14.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15.   Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window

Randolph Building
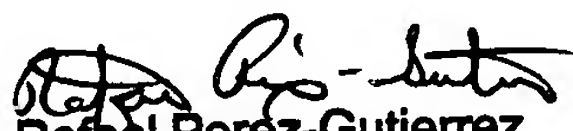401 Dulany Street
Alexandria, VA 22314

16.   Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to Allahyar Kasraian whose telephone number is (571)

270-1772. The Examiner can normally be reached on Monday-Thursday from 8:00 a.m.

to 5:00 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

supervisor, Rafael Pérez-Gutiérrez can be reached on (571) 272-7915. The fax phone

number for the organization where this application or proceeding is assigned is (571)

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist/customer service whose telephone

number is (571) 272-2600.

Allahyar Kasraian
A.K./ak
January 25, 2008

Rafael Peréz-Gutierrez
Supervisory Patent Examiner
Technology Center 2600
Art Unit 2617

2/4/08